

In the Claims:

Please amend the claims as follows:

1-12 (previously canceled)

13. (previously presented) A zirconium-based alloy suitable for use in a corrosive environment where it is subjected to increased radiation, the alloy including zirconium having a quality and impurity level suitable for use in reactors, the alloy comprising:

0.65-1.6 percent by weight Nb;

0.3-0.6 percent by weight Fe; and

0.65-0.85 percent by weight Sn.

14. (previously presented) The zirconium-based alloy according to claim 13, further comprising:

up to 0.2 percent by weight Ni.

15. (previously presented) The zirconium-based alloy according to claim 13, further comprising:

up to 0.6 percent by weight Cr.

16. (previously canceled)

17. (previously presented) The zirconium-based alloy according to claim 13, wherein the alloy comprises a part of a component in a nuclear energy plant.

18. (previously presented) The zirconium-based alloy according to claim 17, wherein the component comprises a part of a fuel assembly.

19. (previously presented) A component in a nuclear energy plant, comprising:  
a zirconium-based alloy comprising 0.65-1.6 percent by weight Nb, 0.3-0.6 percent by weight Fe, and 0.65-0.85 percent by weight Sn.

20. (previously presented) The component according to claim 19, wherein the component comprises a part of a fuel assembly.

21. (previously presented) The component according to claim 20, wherein the component comprises a cladding tube for nuclear fuel.

22. (previously presented) The component according to claim 21, wherein at least a part of an inner circumference of the component comprises a layer of a material that is more ductile than the alloy.

23. (previously presented) The component according to claim 22, wherein the layer comprises a zirconium-based alloy having a total content of alloying elements that does not exceed 0.5 percent by weight.

24. (previously presented) The component according to claim 19, wherein the component comprises a cladding tube for nuclear fuel.

25. (previously presented) The component according to claim 24, wherein at least a part of an inner circumference of the component comprises a layer of a material that is more ductile than the alloy.

26. (previously presented) The component according to claim 25, wherein the layer comprises a zirconium-based alloy having a total content of alloying elements that does not exceed 0.5 percent by weight.

27. (new) A component for a nuclear energy plant, comprising:  
a zirconium-based alloy comprising 0.65-1.6 percent by weight Nb, 0.3-0.6 percent by weight Fe, and 0.65-0.85 percent by weight Sn and having a substantially uniform composition throughout.

28. (new) The component according to claim 27, further comprising:  
up to 0.2 percent by weight Ni; and  
up to 0.6 percent by weight Cr.